SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **AGC Brightening additive, AGC Brightening additive Multi**

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the mixture
- Electroplating auxiliary
- Auxiliary for dental technology

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
- Ivoclar Vivadent AG
- Bendererstrasse 2
- LI-9494 Schaan
- PRINCIPALITY OF LIECHTENSTEIN

Tel: +423 235 35 35
Fax: +423 235 33 60

Further information obtainable from:
- Regulatory Affairs
- sds@ivoclarvivadent.com

1.4 Emergency telephone number: +423 / 235 33 13 (Ivoclar Vivadent AG, LI-9494 Schaan, Liechtenstein)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
The product is not classified according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Additional information:
  - Safety data sheet available on request.

2.3 Other hazards

Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components: Void

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: No special measures required.
45.0

∙ After inhalation:
  Supply fresh air or oxygen; call for doctor.
  In case of unconsciousness place patient stably in side position for transportation.

∙ After skin contact:
  Rinse with water.

∙ After eye contact:
  Rinse opened eye for several minutes under running water. Then consult a doctor.

∙ After swallowing:
  Rinse out mouth and then drink plenty of water.
  Seek immediate medical advice.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

∙ 5.1 Extinguishing media
  Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

∙ 5.2 Special hazards arising from the substance or mixture
  No further relevant information available.

∙ 5.3 Advice for firefighters
  Protective equipment: No special measures required.

SECTION 6: Accidental release measures

∙ 6.1 Personal precautions, protective equipment and emergency procedures
  Wear protective clothing.
  Dilute with plenty of water.
  Do not allow to enter sewers/surface or ground water.

∙ 6.2 Environmental precautions:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

∙ 6.3 Methods and material for containment and cleaning up:
  See Section 7 for information on emergency procedures.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 7: Handling and storage

∙ 7.1 Precautions for safe handling
  Only adequately trained personnel should handle this product.
  For use in dentistry only.
  Ensure good ventilation/exhaustation at the workplace.
  Prevent formation of aerosols.

∙ Information about fire - and explosion protection:
  No special measures required.

∙ 7.2 Conditions for safe storage, including any incompatibilities
  Storage:
  Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
  Information about storage in one common storage facility:
  Further information about storage conditions:
  Keep container tightly sealed.
  Protect from heat and direct sunlight.

∙ 7.3 Specific end use(s)
  No further relevant information available.
SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
    Usual hygienic measures for dental practice and dental laboratories.
    Keep away from foodstuffs, beverages and feed.
    Wash hands before breaks and at the end of work.
    Avoid contact with the eyes and skin.
  - Respiratory protection:
    Not necessary if room is well-ventilated.
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  - Recommended filter device for short term use: Filter P (EN 143)
  - Protection of hands:
    Protective gloves (EN 374)
    After use of gloves apply skin-cleaning agents and skin cosmetics.
  - Material of gloves
    Butyl rubber, BR
    Fluorocarbon rubber (Viton)
    Nitrile rubber, NBR
    Chloroprene rubber, CR
  - Penetration time of glove material
    The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - Eye protection:
    Tightly sealed goggles (EN 166)
  - Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
- General Information
  - Appearance:
    - Form: Fluid
    - Colour: Colourless
    - Odour: Odourless
    - Odour threshold: Not determined.
Safety data sheet  
according to 1907/2006/EC, Article 31  

Printing date 17.01.2019  
Revision: 17.01.2019  
Version number 1

Trade name: AGC Brightening additive, AGC Brightening additive Multi

- pH-value at 20 °C: 5
- Change in condition
  - Melting point/freezing point: Undetermined.
  - Initial boiling point and boiling range: ca. 100 °C
- Flash point: Not applicable.
- Flammability (solid, gas): Not applicable.
- Auto-ignition temperature: Product is not selfigniting.
- Explosive properties: Product does not present an explosion hazard.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapour pressure: Not determined.
- Density at 20 °C: 1.02 g/cm³
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with water: Fully miscible.
- Partition coefficient: n-octanol/water: Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- 9.2 Other information
  - No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity
  - No further relevant information available.
- 10.2 Chemical stability
  - Stable under normal handling and storage conditions.
- 10.3 Thermal decomposition / conditions to be avoided
  - No decomposition if used according to specifications.
- 10.4 Conditions to avoid
  - No further relevant information available.
- 10.5 Incompatible materials
  - No further relevant information available.
- 10.6 Hazardous decomposition products
  - None under normal conditions of storage and use.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity
    - Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:
  - CAS: 6535-15-5 antimony(3+) potassium [R-(R*,R*)]-monotartrate
  - Oral LD50 115 mg/kg (rat)
  - Skin corrosion/irritation
    - Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation
    - Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation
    - Based on available data, the classification criteria are not met.
  - Germ cell mutagenicity
    - Based on available data, the classification criteria are not met.
  - Carcinogenicity
    - Based on available data, the classification criteria are not met.

(Contd. on page 5)
SECTION 12: Ecological information

· 12.1 Toxicity

<table>
<thead>
<tr>
<th>Aquatic toxicity:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 6535-15-5 antimony(3+) potassium [R-(R*,R*)]-monotartrate</td>
<td></td>
</tr>
<tr>
<td>LC₅₀/96 h</td>
<td>37 mg/l (fish) (Max.)</td>
</tr>
<tr>
<td></td>
<td>37 mg/l (fish) (Min.)</td>
</tr>
<tr>
<td></td>
<td>37 mg/l (fish) (Median)</td>
</tr>
<tr>
<td>LC₅₀/48 h</td>
<td>5 mg/l (crustaceans) (Min.)</td>
</tr>
<tr>
<td></td>
<td>5 mg/l (crustaceans) (Median)</td>
</tr>
<tr>
<td></td>
<td>6.7 mg/l (crustaceans) (Max.)</td>
</tr>
</tbody>
</table>

· 12.2 Persistence and degradability | No further relevant information available. |
· 12.3 Bioaccumulative potential | No further relevant information available. |
· 12.4 Mobility in soil | No further relevant information available. |
· Additional ecological information:
  · General notes:
    Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
· 12.5 Results of PBT and vPvB assessment
  · PBT: | Not applicable. |
  · vPvB: | Not applicable. |
· 12.6 Other adverse effects | No further relevant information available. |

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

| Recommendation | Must not be disposed together with household garbage. Do not allow product to reach sewage system. |
|               | Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority. |

| Uncleaned packaging: | Recommendation: Disposal must be made according to official regulations. |

SECTION 14: Transport information

· 14.1 UN-Number

| ADR/RID/ADN, ADN, IMDG, IATA | Void |

· 14.2 UN proper shipping name

| ADR/RID/ADN, ADN, IMDG, IATA | Void |

· 14.3 Transport hazard class(es)

| ADR/RID/ADN, ADN, IMDG, IATA | Class | Void |
Safety data sheet
according to 1907/2006/EC, Article 31

Printed date 17.01.2019
Revision: 17.01.2019
Version number 1

Trade name: AGC Brightening additive, AGC Brightening additive Multi

(Contd. of page 5)

<table>
<thead>
<tr>
<th>14.4 Packing group</th>
<th>Void</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR/RID/ADN, IMDG, IATA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14.5 Environmental hazards:</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>14.6 Special precautions for user</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Transport/Additional information:</th>
<th>Product is not classified as a dangerous good for transport (ADR, IMDG, IATA).</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>UN &quot;Model Regulation&quot;:</th>
<th>Void</th>
</tr>
</thead>
</table>

SECTION 15: Regulatory information

<table>
<thead>
<tr>
<th>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Directive 2012/18/EU</td>
</tr>
<tr>
<td>· Named dangerous substances - ANNEX I</td>
</tr>
<tr>
<td>· National regulations:</td>
</tr>
<tr>
<td>· Other regulations, limitations and prohibitive regulations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15.2 Chemical safety assessment:</th>
<th>A Chemical Safety Assessment has not been carried out.</th>
</tr>
</thead>
</table>

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

<table>
<thead>
<tr>
<th>Classification according to Regulation (EC) No 1272/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Abbreviations and acronyms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>IMDG: International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>IATA: International Air Transport Association</td>
</tr>
<tr>
<td>GHS: Globally Harmonised System of Classification and Labelling of Chemicals</td>
</tr>
<tr>
<td>EINECS: European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS: European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>CAS: Chemical Abstracts Service (division of the American Chemical Society)</td>
</tr>
<tr>
<td>LC50: Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50: Lethal dose, 50 percent</td>
</tr>
<tr>
<td>PBT: Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>vPvB: very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>